



## CALIFORNIA DEPARTMENT OF HEALTH SERVICES

# DHS WORKING TO SOLVE MERCURY CONTAMINATION PROBLEMS ALMADEN QUICKSILVER SITE

San Jose, California

September 1987

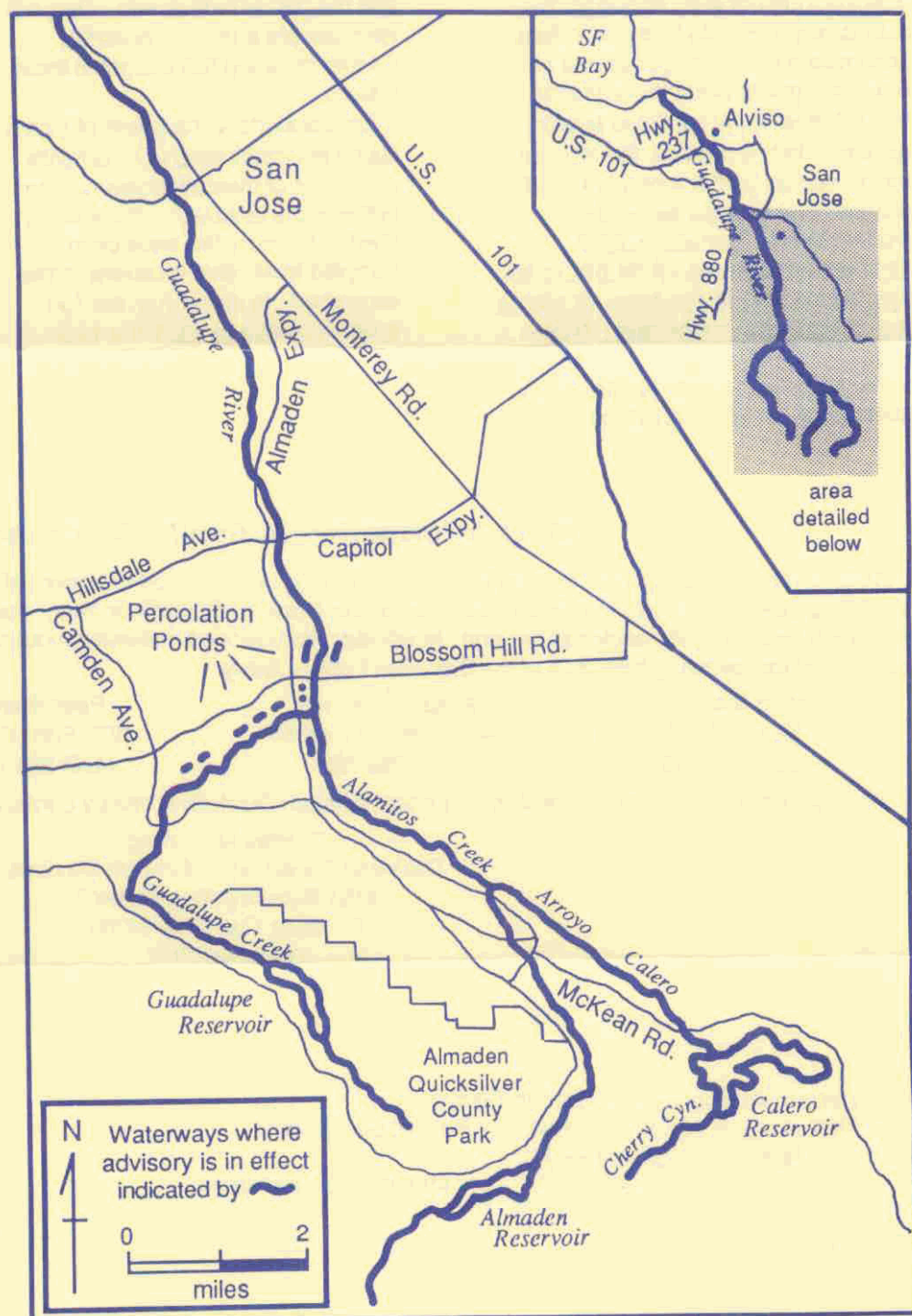
The California Department of Health Services (DHS) has determined that past mining operations at the Almaden Quicksilver Park have caused mercury contamination problems in the area. DHS is particularly concerned about fish contamination in nearby waterways. DHS believes that the contamination poses a health threat to area residents, and is working with other State and local agencies, including the California Department of Fish & Game, the Santa Clara County Health Department and Department of Parks & Recreation, and the Santa Clara Valley Water District to determine the extent of contamination and reduce the health risk posed by the contamination. This fact sheet is the first in a series of fact sheets DHS will provide throughout the investigation to keep you informed about significant site findings and activities.

## Mine History and Contamination Discovery

The New Almaden Mining District, located in southern San Jose, was in operation from 1845 until 1948. At one time, the New Almaden mines, the largest in North America, supplied mercury to the U.S., China, Mexico, and South America. The mine property was purchased in 1975 by Santa Clara County for use as a county park.

The mercury ore mined at New Almaden was cinnabar (mercury sulfide). Production took place on-site in a vessel known as a retort by a two-step process of (1) cooking the ore and (2) condensing the mercury that was released in vaporous form. Considerable quantities of mercury were lost in this process. The used ore, containing traces of mercury, was disposed on-site.

In June 1986, DHS and the County Department of Parks & Recreation conducted preliminary tests that showed **soils on the park property to contain mercury at concentrations above the State's minimum criteria for hazardous waste.** Air in dry wells on the park property was also found to contain **mercury vapor at levels exceeding Federal and State allowable levels.** In August 1986, the State Department of Fish & Game and DHS collected 100 fish from locations in the Guadalupe River watershed, including the Guadalupe River, the Guadalupe and Alamos Creeks, and the Guadalupe and Calero reservoirs. Results from the **laboratory analysis showed that sixty-nine percent of the fish sampled, which were rainbow trout, black crappie, largemouth bass, and bluegill, contained mercury above the U.S. Food & Drug Administration limit for mercury in fish tissues.**



**Waterways Where DHS  
Fish Advisory is in Effect**



Please place me on the mailing list for the Almaden Quicksilver Site.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_

Return to: Charles Armstrong, DHS, 2151 Berkeley Way, Annex 7, Berkeley, CA 94704

## DHS Issues Health Warning to Residents

DHS believes it is essential that residents understand how this contamination problem can pose a threat to human health. At this time, the only known health hazard outside of the park boundaries that is related to the mercury contamination at the Alameda Quicksilver site is the hazard posed by eating fish or plants found in waters draining from the site. Although mercury is very insoluble in water, it does accumulate in aquatic plants and soils. Smaller organisms eat these plants, and fish eventually eat these smaller organisms. In this manner, the mercury moves rapidly up the food chain and accumulates in larger fish at the highest levels. **Therefore, DHS strongly advises residents not to eat any fish caught in the area, or plants that grow in the waterways.** However, the water in the creeks, reservoirs, and river is safe for drinking, swimming, or other activities.

## DHS Taking Action to Solve the Problem

Based on the results of last year's fish sampling effort, DHS ordered the Santa Clara Valley Water District and Santa Clara County Public Health Department to post signs along the watershed. The signs will be posted this fall at access points for the Guadalupe, Calero, and Almaden reservoirs, the Guadalupe River, Guadalupe Creek, Alamos Creek, and the percolation ponds. They will warn people about the potential danger of eating fish caught in these waters.

DHS and the Department of Fish & Game are continuing to investigate the extent of mercury contamination in fish in the Guadalupe River watershed. 100 more fish have been sampled from other locations in the watershed. In addition to the fish species caught in 1986, the 1987

catch includes crayfish, suckers, and bullheads.

DHS recognizes that more information about the extent of soil contamination on and extending away from the Almaden Quicksilver park property is needed to understand the problem more fully. For this reason, DHS is preparing a Remedial Action Order directed to the County of Santa Clara and other previous owners of the Almaden Quicksilver property who can be identified. The Order is an enforceable document that will provide direction to the responsible parties concerning what DHS considers to be an appropriate process for investigating and cleaning up the problem.

## More Information Is Available for the Public

DHS will be holding a public meeting in the future to provide interested members of the public with more information about both the problem and DHS and County activities at the Almaden Quicksilver Park. You can receive direct notification of the meeting by returning the enclosed coupon. In addition, background materials about the mercury contamination at the Park are available at the following branches of the San Jose Public Library:

Main Branch  
180 W. San Carlos Avenue  
(408) 277-4815

Almaden Branch  
6455 Camden Avenue  
(408) 268-7601

Pearl Branch  
4270 Pearl Avenue  
(408) 265-7833

Educational Park Branch  
1770 Educational Park Drive  
(408) 272-3662

You can obtain additional information about the Almaden Quicksilver site by contacting the DHS Project Officer:

Charles Armstrong  
California Department of Health Services  
2151 Berkeley Way, Annex 7  
Berkeley, California 94704  
(415) 540-2312

California Department of Health Services  
Toxic Substances Control Division, North Coast Section  
2151 Berkeley Way, Annex 7  
Berkeley, California 94704

Attn: Charles Armstrong

First Class Mail  
U.S. Postage  
Paid  
San Francisco, CA  
Permit No. 11412

## Inside:

Information about the  
mercury problem in  
San Jose waterways